ISO SC4/WG10 AP Modularization Workshop

Orlando
January 31, 1998

WG10 AP Modularization Process

- **Florence WG10 one day workshop**
  - Several presentations on concepts
  - Based on similarity and resources, decided to proceed via PDES, Inc. team developing approach
    - Guidelines and sample modules were produced
- **Two interim WG10 three day workshops**
  - Review approach and guidelines
  - Gain consensus and generate issues
- **Orlando WG10 one day workshop**
  - Based on progress, build development plans

Original Interim Workshop Objectives

– **Review draft of new Application Module Development Guidelines**

– **Review draft of updated Application Protocol Development using Modules Guidelines**

– **Walk through and review several draft Application Modules for content, scope and form**

– **Develop develop a coordinated plan of action for the participants to agree on a set of AMs and sample AM-based APs in preparation for follow-on work in evolving the current STEP standard into a modular set of capabilities.**

Interim Workshop Agendas

- **Day 1**
  - **Welcome, Introductions, set detailed agenda**
  - **Review AM Approach and Guidelines**
- **Day 2**
  - **Open discussion and presentations**
  - **AM samples walkthrough, approach, framework**
- **Day 3**
  - **Review AP Approach and Guidelines**
  - **Review new issues and results**
  - **Next steps, action items, planning**

London Workshop Review (1)

- **Presentation/Discussion Agenda**
  - **Day 1**
    - **D. Price - Review Florence WG10 AM material and new guidelines proposal**
  - **Day 2**
    - **R. Goult - Issues against approach and guidelines**
    - **C. Vaughn/R. Barra - Diagram of module clusters based on summary**
    - **T. Turner - Shipbuilding Building Blocks**
    - **R. Barra - PDES, Inc. modules approach**
    - **R. Barra - Two sample modules**
    - **N. Swindells - Possible modules from materials area**

London Workshop Review (2)

  - **Day 3**
    - **C. Vaughn - Module framework web demo based on IIM paper**
    - **J. Fowler - Approach to Modularization**
    - **D. Price - Florence WG10 AP using modules material**
    - **D. Price - Next actions, Orlando planning. wrap-up**
- **Results**
  - **Good exchange of ideas**
  - **Confirmation that modularization is necessary**
  - **Issues Log**
  - **Next actions**

London Workshop Review (3)

- **Next Actions**
  - Move to some level of experimentation
    - Agree on one scope, have two groups develop modules to meet that scope, compare the results (PDES, Inc. and Shipbuilding)
    - Produce modules based on both the ARMed approach and the ARM-less approach and compare results (PDES, Inc., J. Fowler, R. Goult for EACM, N. Swindells)
  - Produce Issues Log and Classify Issues (D. Price)

London Workshop Review (4)

- **Next Actions continued**
  - Complete AP Development Guidelines 0.3 but do not update yet per workshop issues (D. Price)
  - Publish web demo (C. Vaughn and J. Fowler)
  - Framework/catalogue coordination (C. Vaughn)
  - Prioritize and resolve issues (WG10 and workshops)

Gaithersburg Workshop Review (1)

- **Presentation/Discussion Agenda**
  - **Day 1**
    - **D. Price - Review Florence WG10 AM material and new guidelines proposal**
  - **Day 2**
    - **D. Price - Continue review Florence WG10 AM material and new guidelines proposal**
    - **R. Barra - PDES, Inc. modules approach**
    - **R. Barra - One sample modules**
    - **D. Price - Julian Fowler's London workshop presentation**

Gaithersburg Workshop Review (2)

- **Day 3**
  - **Agreement on consensus items**
  - **Review London next actions**
  - **Brainstorming possible alternative approaches**
- **Results**
  - **Confirmation that modularization is necessary**
  - **Issues addressed via experiment rather than debate**
  - **Development should continue parallel to SC4**
  - **Need for supporting organization parallel to SC4**

Gaithersburg Workshop Review (3)

- **Identified four areas for activity**
  - **Technical development**
  - **Framework/catalogue development**
  - **Methodology and guidelines development**
  - **New organizational structure/process development and control**

Proposed Plan

- **2Q98 : Experiment among the possible approaches and determine the best one**
- **2Q98 : Document the approach and technical content of an AM and an AP using AMs**
- **3Q98 : Develop an AM scoping and integration support process for teams developing AMs and APs**
  - **Development and support of the AM catalogue**
- **4Q98 :Develop AMs and APs using AMs**

Potential Recommendations for AP development teams

- – **For any AP not yet through interpretation**
  - • **Adopt the AP modularization approach**
- – **For any AP not yet in CD ballot cycle**
  - • **Adopt the AP modularization approach in any known areas of overlap with existing or in development APs**
- – **For any AP that has passed CD ballot, is DIS, FDIS or IS**
  - • **Make a case by case determination on modularizing the technical contents for inclusion in the AM catalog**

Potential Recommendations to SC4

- – **Accept AMs as a new type of ISO 10303 Part**
  - • **or as the next generation of AIC**
- – **Accept that APs may be published using the AP modularization approach**
- – **Prepare for finalization of new Guidelines, new Methods, AMs and modularized APs**
  - • **Best estimate is October 98**